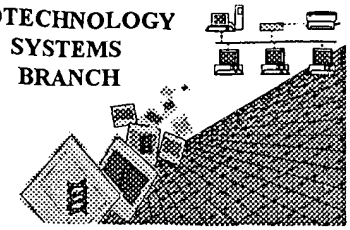
10 correction

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/614,414
Source: OIPE
Date Processed by STIC: 7/29/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**>, **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/614,414

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4	Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5	Variable Length	Sequence(s) ____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	~~Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.~~ Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

OIPE

RAW SEQUENCE LISTING DATE: 07/29/2003
PATENT APPLICATION: **US/10/614,414** TIME: 13:48:23

Input Set : **A:\Andcpdv1.app**
Output Set: **N:\CRF4\07292003\J614414.raw**

```
      3 <110> APPLICANT: ALBANI, SALVATORE
      5 <120> TITLE OF INVENTION: METHOD FOR ISOLATION, QUANTIFICATION, CHARACTERIZATION
      6       AND MODULATION OF ANTIGEN-SPECIFIC T CELLS
      8 <130> FILE REFERENCE: AND-TCCCIP1-DIV1
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/614,414
C--> 11 <141> CURRENT FILING DATE: 2003-07-07
     13 <150> PRIOR APPLICATION NUMBER: 09/756,983
     14 <151> PRIOR FILING DATE: 2001-01-09
     16 <150> PRIOR APPLICATION NUMBER: PCT/US99/24666
     17 <151> PRIOR FILING DATE: 1999-10-19
     19 <150> PRIOR APPLICATION NUMBER: 09/421,506
     20 <151> PRIOR FILING DATE: 1999-10-19
     22 <150> PRIOR APPLICATION NUMBER: 60/105,018
     23 <151> PRIOR FILING DATE: 1998-10-20
     25 <160> NUMBER OF SEQ ID NOS: 24
     27 <170> SOFTWARE: PatentIn Ver. 2.1
     29 <210> SEQ ID NO: 1
     30 <211> LENGTH: 17
     31 <212> TYPE: PRT
     32 <213> ORGANISM: Artificial Sequence
     34 <220> FEATURE:
     35 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide derived
     36       from third hyper V region of IE molecule of Mus musculus
     38 <400> SEQUENCE: 1
     39 Ala Ser Phe Glu Ala Gln Gly Ala Leu Ala Asn Ile Ala Val Asp Lys
     40   1               5                  10                  15
     42 Ala
     46 <210> SEQ ID NO: 2
     47 <211> LENGTH: 15
     48 <212> TYPE: PRT
     49 <213> ORGANISM: Artificial Sequence
     51 <220> FEATURE:
     52 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide derived
     53       from bole I protein of Epstein Barr virus
     55 <400> SEQUENCE: 2
     56 Thr Arg Asp Asp Ala Glu Tyr Leu Leu Gly Arg Glu Ser Val Leu
     57   1               5                  10                  15
     60 <210> SEQ ID NO: 3
     61 <211> LENGTH: 16
     62 <212> TYPE: PRT
     63 <213> ORGANISM: Artificial Sequence
     65 <220> FEATURE:
     66 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide derived
```

Does Not Comply
Corrected Diskette Needed

p.3

RAW SEQUENCE LISTING DATE: 07/29/2003
PATENT APPLICATION: **US/10/614,414** TIME: 13:48:23

Input Set : **A:\Andcpdv1.app**
Output Set: **N:\CRF4\07292003\J614414.raw**

```
     67       from the haemophilus influenza virus
     69 <400> SEQUENCE: 3
     70 Thr Ser Phe Pro Met Arg Gly Asp Leu Ala Lys Arg Glu Pro Asp Lys
     71   1               5                  10                  15
     74 <210> SEQ ID NO: 4
     75 <211> LENGTH: 36
     76 <212> TYPE: PRT
     77 <213> ORGANISM: Artificial Sequence
     79 <220> FEATURE:
     80 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide derived
     81       from the TCR receptor of Mus musculus
     83 <220> FEATURE:
     84 <221> NAME/KEY: MOD_RES
     85 <222> LOCATION: (18)
     86 <223> OTHER INFORMATION: Ser, Ile or Thr
     88 <400> SEQUENCE: 4
     89 Leu His Ile Ser Ala Val Asp Pro Glu Asp Ser Ala Val Tyr Phe Cys
     90   1               5                  10                  15
W--> 92 Ala Xaa Ser Gln Glu Phe Phe Ser Ser Tyr Glu Gln Tyr Phe Gly Pro
     93              20                  25                  30
     95 Gly Thr Arg Leu
     96          35
     99 <210> SEQ ID NO: 5
    100 <211> LENGTH: 9
    101 <212> TYPE: PRT
    102 <213> ORGANISM: Artificial Sequence
    104 <220> FEATURE:
    105 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
derived
    106       from the influenza virus
    108 <400> SEQUENCE: 5
    109 Gly Ile Leu Gly Phe Val Phe Thr Leu
    110   1               5
    113 <210> SEQ ID NO: 6
    114 <211> LENGTH: 9
    115 <212> TYPE: PRT
    116 <213> ORGANISM: Artificial Sequence
    118 <220> FEATURE:
    119 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
derived
    120       from the influenza virus
    122 <400> SEQUENCE: 6
    123 Val Lys Leu Gly Glu Phe Tyr Asn Gln
    124   1               5
    127 <210> SEQ ID NO: 7
    128 <211> LENGTH: 11
    129 <212> TYPE: PRT
    130 <213> ORGANISM: Artificial Sequence
    132 <220> FEATURE:
    133 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
    135 <220> FEATURE:
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RAW SEQUENCE LISTING DATE: 07/29/2003
PATENT APPLICATION: **US/10/614,414** TIME: 13:48:23

Input Set : **A:\Andcpdv1.app**
Output Set: **N:\CRF4\07292003\J614414.raw**

136 <221> NAME/KEY: MOD_RES
137 <222> LOCATION: (2)
138 <223> OTHER INFORMATION: cyclohexylalanine
140 <400> SEQUENCE: 7
W--> 141 Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala Ala
142 1 5 10
145 <210> SEQ ID NO: 8
146 <211> LENGTH: 13
147 <212> TYPE: PRT
148 <213> ORGANISM: Artificial Sequence
150 <220> FEATURE:
151 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide derived
152 from the influenza virus
154 <400> SEQUENCE: 8
155 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala Thr
156 1 5 10
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 17
161 <212> TYPE: PRT
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificial
167 <400> SEQUENCE: 9
168 Ile Ser Gln Ala Val His Ala Ala His Ala Glu Ile Asn Glu Ala Gly
169 1 5 10 15
171 Arg
175 <210> SEQ ID NO: 10
176 <211> LENGTH: 15
177 <212> TYPE: PRT
178 <213> ORGANISM: Escherichia coli
180 <400> SEQUENCE: 10
181 Gln Lys Arg Ala Ala Tyr Asp Gln Tyr Gly His Ala Ala Phe Glu
182 1 5 10 15
185 <210> SEQ ID NO: 11
186 <211> LENGTH: 15
187 <212> TYPE: PRT
188 <213> ORGANISM: Homo sapiens
190 <400> SEQUENCE: 11
191 Gln Lys Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr Gly
192 1 5 10 15
195 <210> SEQ ID NO: 12
196 <211> LENGTH: 9
197 <212> TYPE: PRT
198 <213> ORGANISM: Homo sapiens
200 <400> SEQUENCE: 12
201 Gly Ile Leu Gly Phe Val Phe Thr Leu
202 1 5
205 <210> SEQ ID NO: 13
206 <211> LENGTH: 9

give source of genetic material (see item 11 on Error Summary Sheet)

RAW SEQUENCE LISTING DATE: 07/29/2003
PATENT APPLICATION: **US/10/614,414** TIME: 13:48:23

Input Set : **A:\Andcpdv1.app**
Output Set: **N:\CRF4\07292003\J614414.raw**

```
207 <212> TYPE: PRT
208 <213> ORGANISM: Homo sapiens
210 <400> SEQUENCE: 13
211 Val Lys Leu Gly Glu Phe Tyr Asn Gln
212   1               5
215 <210> SEQ ID NO: 14
216 <211> LENGTH: 13
217 <212> TYPE: PRT
218 <213> ORGANISM: Homo sapiens
220 <400> SEQUENCE: 14
221 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala Thr
222   1               5                  10
225 <210> SEQ ID NO: 15
226 <211> LENGTH: 942
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Description of Artificial Sequence: Fusion construct with
232       human and bacterial sequences
234 <220> FEATURE:
235 <221> NAME/KEY: CDS
236 <222> LOCATION: (1)..(939)
238 <400> SEQUENCE: 15
239 atg ggc cac aca cgg agg cag gga aca tca cca tcc aag tgt cca tac   48
240 Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
241   1               5                  10                  15
243 ctc aat ttc ttt cag ctc ttg gtg ctg gct ggt ctt tct cac ttc tgt   96
244 Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
245             20                  25                  30
247 tca ggt gtt atc cac gtg acc aag gaa gtg aaa gaa gtg gca acg ctg   144
248 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
249         35                  40                  45
251 tcc tgt ggt cac aat gtt tct gtt gaa gag ctg gca caa act cgc atc   192
252 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
253     50                  55                  60
255 tac tgg caa aag gag aag aaa atg gtg ctg act atg atg tct ggg gac   240
256 Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
257 65                  70                  75                  80
259 atg aat ata tgg ccc gag tac aag aac cgg acc atc ttt gat atc act   288
260 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
261                 85                  90                  95
263 aat aac ctc tcc att gtg atc ctg gct ctg cgc cca tct gac gag ggc   336
264 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
265             100                 105                 110
267 aca tac gag tgt gtt gtt ctg aag tat gaa aaa gac gct ttc aag cgg   384
268 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
269         115                 120                 125
271 gaa cac ctg gct gaa gtg acg tta tca gtc aaa gct gac ttc cct aca   432
272 Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
```

RAW SEQUENCE LISTING DATE: 07/29/2003
PATENT APPLICATION: **US/10/614,414** TIME: 13:48:23

Input Set : **A:\Andcpdv1.app**
Output Set: **N:\CRF4\07292003\J614414.raw**

```
273     130                 135                 140
275 cct agt ata tct gac ttt gaa att cca act tct aat att aga agg ata   480
276 Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
277 145                 150                 155                 160
279 att tgc tca acc tct gga ggt ttt cca gag cct cac ctc tcc tgg ttg   528
280 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
281                 165                 170                 175
283 gaa aat gga gaa gaa tta aat gcc atc aac aca aca gtt tcc caa gat   576
284 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
285             180                 185                 190
287 cct gaa act gag ctc tat gct gtt agc gaa ttc ggc ggc tcc ggt ggt   624
288 Pro Glu Thr Glu Leu Tyr Ala Val Ser Glu Phe Gly Gly Ser Gly Gly
289         195                 200                 205
291 agc gcc aca cct caa aat att act gat ttg tgt gca gaa tac cac aac   672
292 Ser Ala Thr Pro Gln Asn Ile Thr Asp Leu Cys Ala Glu Tyr His Asn
293     210                 215                 220
295 aca caa ata cat acg cta aat gat aag ata ttt tcg tat aca gaa tct   720
296 Thr Gln Ile His Thr Leu Asn Asp Lys Ile Phe Ser Tyr Thr Glu Ser
297 225                 230                 235                 240
299 cta gct gga aaa aga gag atg gct atc att act ttt aag aat ggt gca   768
300 Leu Ala Gly Lys Arg Glu Met Ala Ile Ile Thr Phe Lys Asn Gly Ala
301                 245                 250                 255
303 act ttt caa gta gaa gta cca ggt agt caa cat ata gat tca caa aaa   816
304 Thr Phe Gln Val Glu Val Pro Gly Ser Gln His Ile Asp Ser Gln Lys
305             260                 265                 270
307 aaa gcg att gaa agg atg aag gat acc ctg agg att gca tat ctt act   864
308 Lys Ala Ile Glu Arg Met Lys Asp Thr Leu Arg Ile Ala Tyr Leu Thr
309         275                 280                 285
311 gaa gct aaa gtc gaa aag tta tgt gta tgg aat aat aaa acg cct cat   912
312 Glu Ala Lys Val Glu Lys Leu Cys Val Trp Asn Asn Lys Thr Pro His
313     290                 295                 300
315 gcg att gcc gca att agt atg gca aat taa                          942
316 Ala Ile Ala Ala Ile Ser Met Ala Asn
317 305                 310
320 <210> SEQ ID NO: 16
321 <211> LENGTH: 313
322 <212> TYPE: PRT
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Description of Artificial Sequence: Fusion construct with
327       human and bacterial sequences
329 <400> SEQUENCE: 16
330 Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
331   1               5                  10                  15
333 Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
334              20                  25                  30
336 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
337          35                  40                  45
339 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/29/2003
PATENT APPLICATION: **US/10/614,414** TIME: 13:48:24

Input Set : **A:\Andcpdv1.app**
Output Set: **N:\CRF4\07292003\J614414.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 18
Seq#:7; Xaa Pos. 2

VERIFICATION SUMMARY DATE: 07/29/2003
PATENT APPLICATION: **US/10/614,414** TIME: 13:48:24

Input Set : **A:\Andcpdv1.app**
Output Set: **N:\CRF4\07292003\J614414.raw**

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:16
L:141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0